

SWIFT User Roles and Conflict Matrix Q & A (as of 1/1/17)

Questions from the January 2013 Webinar

Where necessary (and labeled accordingly), answers have been updated since January 2013, when this document was originally produced.

Q1: Are there any reports that we could use to monitor compensating controls?

A: The short answer is no. However, there are existing tools such as the incompatible role report and conflict matrix, to help determine where the compensating controls will be needed. Individual agencies determine their own compensating controls.

Q2: Every single user at our agency will likely need some change to their SWIFT/SEMA4 profiles.

Do you expect one SWIFT Access Request form for each user? Is there a more efficient way?

A: For existing users that need roles *removed*, each Agency SWIFT Security Administrator has that ability (so this work can be done within each agency). For existing users that need roles and/or route controls *added*, an Excel Spreadsheet can be submitted to the SEMA4 Security Unit (SEMA4.Security@state.mn.us) with the user's ID and exact role name. Instructions are at http://www.mn.gov/mmb/accounting/swift/security/security_forms.jsp under "Add FMS & EPM Roles through Excel" and "Add Route Controls through Excel". User preference changes should be submitted using the standard request form for access to SWIFT Statewide Systems.

Q3: We have been having issues with roles coming back to employees when we need to restore roles that have been deleted due to HR transactions. When will the deleted roles no longer be on the History so that they don't reinstate?

A: Starting in June of 2011, SWIFT Role History was retained for Users with specific job status changes that fell into the criteria of role removal. The job status criteria range from job code change to termination. Any follow-up job status changes resulting in role removal would cumulatively be written to role history. In April of 2012, an update to the process was put in place where the Users' roles would be retained until the User had another Job status change. At that point, the 'old' retained roles would be deleted and the current roles retained. If you wish to have a specific scenario researched, please forward the employee ID number of the employee and a scenario summary of the issue to SEMA4.Security@state.mn.us.

Q4: Where is the MMB Statewide Procedure 1101-07.02, which details the compensating control procedures? I can't find it on MMB's Website.

A: MMB Statewide Procedure, 1101-07.2, *Compensating Controls*, is in Statewide Financial Policies, Chapter 11, at: <http://www.mn.gov/mmb/accounting/state-financial-policies/ch11.jsp>. This procedure is related to MMB Operating Policy 1101-07, *Security and Access*, which is on the same page.

Access all of the MMB statewide financial policies and procedures from the MMB website at <http://www.mn.gov/mmb/>. Once at the MMB homepage, select Accounting, then Statewide Financial Policies.

Q5: What if we don't have compensating controls?

A: Your agency will be in violation of statewide policy. More importantly, financial risk to your agency will be increased and could result in loss of state money/assets, which could negatively impact the agency's ability to meet its objectives and mission in an efficient and effective manner.

Ultimately, decisions about the extent of mitigating controls must be made by agencies. In other words, the agency will be responsible and held accountable for any unmitigated risks remaining in the business process.

Finally, the Office of the Legislative Auditor (OLA) is aware of both the statewide policy and the conflict matrix. OLA auditors may ask agencies about their mitigating controls during regularly

scheduled audits. If the OLA determines that an agency does not have sufficient compensating control procedures in place where required, or deems the procedures ineffective, there is a strong likelihood the OLA would cite the internal control weakness and policy violation in their audit report.

Q6: Have the roles of entering an invoice and doing an expenditure correction been separated? If no, why not?

A: This would need to be separated with user preferences. The same SWIFT page is used to enter regular and Journal vouchers in SWIFT. We could remove the ability for a user to select journal vouchers from the user's preferences.

Q7: Will there be an incompatible access report that does not duplicate all cases of incompatible access?

A: Yes, the duplication issue with the Incompatible Security Report #PFHR5190 has been corrected. Also, see Q&A #27.

Q8 (updated 11/1/15): What is the purpose of the Conflict Matrix?

Q: Is there any documentation on why roles are conflicting so that we can understand the conflict and use the information to design mitigating controls?

A: The purpose of the Conflict Matrix is to identify combinations of security roles that, if assigned to a single user, would result in an inadequate segregation of duties, presenting additional risk to the organization.

Management must achieve two critical objectives when assigning security roles. First, employees must be granted the access to systems, programs, and data needed to perform their specific job functions. Second, management must maintain adequate separation between incompatible duties. Providing incompatible access to employees increases financial risk, since these employees have the ability to create and conceal fraud, misstatements, or errors in the course of their normal job duties (i.e., they could process a transaction from start to finish without a second set of eyes reviewing the transaction).

Ideal segregation of duties is achieved when the following functional responsibilities are separated between different individuals:

1. Authorization or approval to execute transactions
2. Recording transactions in accounting records
3. Custody of assets involved in the transactions
4. Periodic reconciliation of existing assets to recorded amounts

Each security role listed on the Conflict Matrix is classified as one of the four functional responsibilities. Also, detailed [security role descriptions](#) provide managers with the information needed to determine why each security role's functional responsibility classification was assigned, and understand why role combinations are identified as conflicting on the matrix. If you remain unsure why a combination of roles is conflicting after reviewing the applicable security role descriptions, you may contact the MMB Internal Control and Accountability Unit for more information.

Q9 (Updated 1/28/15): Conflict Matrix - has the OLA reviewed and approved or agree with this Matrix?

A: No. MMB did not request OLA approval prior to publishing the current matrix, or any other previous versions of the matrix.

The OLA, as part of their 2011 SWIFT audit (OLA report 11-24), evaluated the conflict matrix that was developed and posted for agency use prior to the July 2011 SWIFT "go-live." MMB reviewed and considered the conflicts the OLA identified in report 11-24, and the methodology they used to determine those conflicts, for each matrix update/revision subsequent to the 2011 go-live matrix."

Q10: The M_FS_AR_ACCT_Maintenance Role is in "Black" on the Conflict Matrix but shows up on

the Incompatible Roles Report as an issue. Why?

A: The matrix is correct; the report was in error. This has been corrected.

Q11: Will we get a high, medium, low priority rating for the conflicts?

A: No. MMB did not prioritize or rank the conflicts by level of risk because what might be low risk at one agency, due perhaps to limited business activity or low dollar amounts processed in one module, could be a high risk at another agency because of more activity or dollars processed through the same module. These differences make it impossible from a centralized viewpoint to make high/medium/low risk determinations.

Q12: (Updated 1/28/15): Is there a possibility that a security role by user table will/can be added to the SWIFT Data Warehouse?

A: This may be possible, but it is not planned at this time. Within SWIFT, there is a report that provides this information, PFHR5191. The report SWIFT Security Roles by User Name (PFHR5191) identifies users' administrative roles in FMS, SEMA4, ELM and the EPM data warehouse. Users are excluded if they have only basic SEMA4 and ELM self-service such as time entry and training registration. The report is in alphabetical order by user name and lists security roles associated with the Employee ID (for FMS, EPM and ELM) followed by those for the employee's mainframe login (SEMA4 administration) if applicable. The report also includes the codes for the user's Row Level Security (SEMA4) and Primary Permission List (FMS) and the employee's agency code and name.

Additional Information: A governance structure was put in place for SWIFT effective July 1, 2013. Requests to alter the functionality of existing PeopleSoft Systems (such as reporting) should be submitted through a specific Service Request process. Additional information regarding how to initiate system changes can be obtained by emailing Swift.Project@state.mn.us.

Q13: Does the security review process cover the Budget Information System (BIS) that we use for Fiscal Notes, or just access to SWIFT and SEMA4?

A: This particular certification is just SWIFT/SEMA4.

Q14 (Updated 1/28/15): Can SWIFT provide a report for internal auditors to run a "dump" of all incompatible transactions run by a SWIFT user?

A: No such report is available at this time. A governance structure was put in place for SWIFT effective July 1, 2013. Requests to alter the functionality of existing PeopleSoft Systems (such as reporting) should be submitted through a specific Service Request process. Additional information regarding how to initiate system changes can be obtained by emailing Swift.Project@state.mn.us.

Q15 (Updated 1/28/15): Are there any reports for transactions completed by individuals with conflicting roles? If there aren't reports available, what is the plan to develop these reports in the future?

A: Such reports do not currently exist, and are not under development. A governance structure was put in place for SWIFT effective July 1, 2013. Requests to alter the functionality of existing PeopleSoft Systems (such as reporting) should be submitted through a specific Service Request process. Additional information regarding how to initiate system changes can be obtained by emailing Swift.Project@state.mn.us.

Q16: Why are some roles listed as conflicting roles on the incompatible roles report but do not show up as self-conflicting roles? For example, the M_FS_AR_ACCT_Maintenance shows on the incompatible security report as a conflict to M_FS_AR_ACCT_Maintenance (the same role).

A: This has been corrected in the report.

Q17: Please explain the conflict with match override and voucher approver.

A: The AP Match Override role is designated as a reconciling function. The AP Voucher Approver role is designated as an approval function. Segregation of duties theory suggests these roles are incompatible and should be segregated, so the matrix was documented accordingly. For specific

information on what each of these roles can do, review the individual security role descriptions.

Q18: (Updated January 1, 2017) Please explain the commitment control (KK) conflicts related to M_FS_KK_BUD_JRNL_ENTRY and M_FS_KK_BUD_JRNL_LOAD with the M_FS_KK_AGENCY_JRNL_APPRVR, M_FS_WF_KK_JRNL_EB_01, and M_FS_WF_KK_JRNL_RB_01 roles. Also, what about the conflict between the M_FS_KK_AGENCY_TRAN_APPRVR and the M_FS_KK_BUD_TRAN_ENTRY roles? What is the reason individuals no longer can perform their duties in processing revenue or expense budgets without a separate approver?

A: **M_FS_KK_BUD_JRNL_ENTRY** and **M_FS_KK_BUD_JRNL_LOAD** are both classified as recording roles. **M_FS_WF_KK_JRNL_EB_01**, and **M_FS_WF_KK_JRNL_RB_01** are approval roles. Segregation of duties theory suggests these roles are incompatible and should be segregated, as reflected in the matrix. For specific information on what each of these roles can do, review the individual security role descriptions.

As a result of an agency question, MMB Internal Control & Accountability and a SWIFT budget subject matter expert reconsidered the **M_FS_KK_AGENCY_JRNL_APPRVR** and **M_FS_KK_AGENCY_TRAN_APPRVR** roles. Both of these roles allow the user to access the applicable KK approval pages as a view only. All KK approvals are done through the applicable KK WF roles. The **M_FS_KK_AGENCY_JRNL_APPRVR** and **M_FS_KK_AGENCY_TRAN_APPRVR** roles, previously considered approval roles, are now reclassified as “inquiry” roles. The Conflict Matrix dated January 1, 2017 reflects this change in classification. As a result, the conflicts between **M_FS_KK_AGENCY_JRNL_APPRVR** and **M_FS_KK_BUD_JRNL_ENTRY** and **M_FS_KK_BUD_JRNL_LOAD** have been removed from the Conflict Matrix. The conflict between the **M_FS_KK_AGENCY_TRAN_APPRVR** and the **M_FS_KK_BUD_TRAN_ENTRY** roles has also been removed from the Conflict Matrix.

Q19: (Updated February 2013): Please explain the conflict with the M_FS_PO_Buyer and the M_FS_WF_SC_Doc_Signer_01, which is the encumbrance verification as the role description states that this role must verify that a PO has been created against the contract before it is signed. Our PO buyers encumber obligations in SWIFT including those for SC so the PO buyers can no longer certify that they encumbered the PO? Please explain the rationale that PO buyers are not able to certify that they encumbered the PO along with how this process should work.

A: As a result of this question, MMB Internal Control & Accountability and the SWIFT PO and SC subject matter experts reconsidered and re-deliberated the risks related to the PO Buyer and SC Doc Signer 01 role combination, and also the PO Buyer and SC Doc Signer 04 role combination. The new determination is there is no conflict between the PO Buyer and the SC Doc Signer 01 roles or between the PO Buyer and SC Doc Signer 04 roles.

The Conflict Matrix, dated “December 2012,” which listed those two sets of role combinations as being in conflict, has been revised and posted to the MMB website. The revised Conflict Matrix no longer lists the PO Buyer role in conflict with either the SC Doc Signer 01 or the SC Doc Signer 04 roles.

The additional discussion with the PO and SC subject matter experts also resulted in identifying three other conflicting role combinations. Specifically, SC Doc Signer 02 role was determined to be the key agency-level approval/delegated authority/contract legal signer role and therefore in conflict with each of the following roles:

- SC Internal Doc Signer
- SC WF Doc Signer 01
- SC WF Doc Approver 04

The revised Conflict Matrix reflects these conflicting roles. The SWIFT security report PFHR5190 has also been revised to reflect all of these changes to the Conflict Matrix.

Q20 (Updated 1/28/15): Why is the AP voucher entry (AP_VOUCHER_ENTRY) reflected on the Conflict Matrix as being incompatible with the vendor request/add/update (VND_AGY_RQUEST_ADD_UPDATE) role?

A: This was not a conflict reflected on the initial “2011 go-live” Conflict Matrix. However, user questions received late in 2012 caused the MMB Internal Control & Accountability Unit and the SWIFT AP and Vendor module subject matter experts to reconsider and re-deliberate the risks related to these roles.

It was determined that by assigning employees the AP voucher entry role (providing the ability to create vouchers to pay vendors) and the vendor request/add/update role (providing the ability to change vendor information such as addresses or bank accounts), risk is increased. For example, an employee with both roles could change vendor information and fraudulently route payments to their own or an accomplice’s address or bank account. Furthermore, the same risks exist between the AP Maintenance voucher error detail (AP_MAINT_VOUCHER_ERROR_DTL) and the vendor request/add/update (VND_AGY_RQUEST_ADD_UPDATE) roles.

Q21: Why is the M_FS_AP_VOUCHER_APPROVER a conflict with M_FS_WF_AP_APPR_02 and M_FS_WF_AP_APPR03? What is the rationale for M_FS_WF_AP_APPR_01 a conflict with M_FS_WF_AP_APPR02 and M_FS_WF_AP_APPR03? What is the rationale for M_FS_WF_AP_APPR02 a conflict with M_FS_WF_AP_APPR_01 and M_FS_WF_AP_APPR03? Does this mean if you approve a payment over \$100,000, you cannot approve the same payment at the approver 1 and 2 level? Please explain how the approver role should work with the WF approver roles and the rationale for the conflicts. (NOTE: See question #’s 22 and 23 for an October 31, 2013, update about these security roles.)

A: This is a policy decision rather than an internal control theory concern or true “conflict.” MMB believes that payments of \$100,000 or more present additional risk and should have three levels of approval. The additional reviews are intended to reduce the risk of fraudulent transactions as well as to ensure errors are identified and resolved prior to executing the transactions. For example, if someone were to be assigned the AP Voucher Approver role along with workflow roles, 01, 02, and 03, that one individual would be able to approve transactions of \$100,000 or more without additional approvals. The matrix was documented to reflect this additional risk (i.e., conflicts) and is intended to enforce the policy requirement of having additional independent approvals for increasingly higher dollar payments, pursuant to Minnesota Management & Budget and Department of Administration MAPS Policy and Procedures 0803-01, Payment Requests, Preparation, and Approval.

Q22 (New 10/31/13): What is the rationale for M_FS_WF_AP_APPR_01 being in conflict with M_FS_WF_AP_APPR_02 and M_FS_WF_AP_APPR_03?

A: Users with all three approval roles would be able to approve a voucher without an additional approval from a second user. This is due to SWIFT automatically approving the voucher at the higher levels because the approval is from the same user. For example, a \$120,000 voucher routed for approval to a user with all three approval levels will approve at level 1 and auto approve at levels 2 and 3. The voucher would be processed without a second user approval at the next level.

Q23 (New 10/31/13): Why is the M_FS_AP_VOUCHER_APPROVER security role no longer appearing on the Conflict Matrix or list of security roles available to agencies?

A: MMB removed this security role from production October 2013. The underlying permissions of the voucher approver role were added to the M_FS_WF_AP_APPR_02 and M_FS_WF_AP_APPR_03 roles to simplify the workflow security set-up. Once those permissions were added to the workflow roles the AP Voucher Approver role was no longer necessary so it was removed from production. The Conflict Matrix, security report PFHR5190, and list of security roles available for agency use were revised October 2013 to reflect these changes.

Q24: Aren't there situations where one person could be assigned to more than one, but not all four, functions on the segregation of duties triangle without the need for mitigating controls?

A: Yes. There are instances where the situation described might be reasonable, or even necessary given resource constraints. Again, the ultimate goal is to have at least two individuals involved in

every transaction. In these situations, it is important that management's considerations, decision, and rationale for those decisions be documented.

Q25: When there is little or no risk involved in a "conflicting roles" scenario, PO Buyer and PO Receiver, when we have someone else as the PO Approver, what Compensating Controls would need to be implemented?

A: The kinds of compensating controls to implement are decisions agency management need to make. The, "there is little or no risk," part of the questions is critical to the decision to determine the type and extent of compensating control procedures to implement. The statement implies the agency has analyzed the situation to determine a low level of risk. These are the types of discussions and analysis agency managers need to have/perform when deciding between segregating incompatible duties versus implementation of compensating controls.

It is important in these situations to document the analysis, considerations, and final rationale for the management decisions made.

Q26 (Updated 1/28/15): The matrix could seem to a user to look overwhelming; does it make sense to instruct staff to review the incompatible report you can run from SWIFT?

A: Yes, both the matrix and report are helpful tools, but the report will best provide each user's total of conflicting roles. Also, refer to question #47 for information regarding an alternative version of the Conflict Matrix which some users may find easier and less overwhelming to work with.

Q27: Will duplicates be removed from report PFHR5190?

A: Yes, the duplication issue with the Incompatible Security Report #PFHR5190 has been corrected. Also, see Q&A #7.

Q28 (Updated 1/28/15): When will OBIEE be completed for reporting?

A: Labor Distribution, Salary Projections, General Ledger/Commitment Control, Accounts Payable, Accounts Receivable, All Receipts and All Expenditures modules have already been implemented. Procurement, Grants & Projects, and Inventory modules will follow in that order.

Q29 (Updated 1/28/15): Where can I go to learn specifics about the conflict matrix and the segregation of duties theory behind the conflicts?

A: There are a number of resources available, including:

- The MMB SWIFT and Internal Control & Accountability Units and the MN.IT @ MMB Security team presented a SWIFT Security Roles Webinar on January 14, 2013. The webinar discussed the 2013 Security and Verification requirements, changes to the suite of security roles available to agencies, the enhanced security role descriptions, segregation of duties theory, and the elements of conflict matrix and how it was constructed. This webinar's PowerPoint slides can be accessed at <http://www.mn.gov/mmb/accounting/swift/security/security-roles.jsp>
- The Internal Control & Accountability website is an excellent resource for information regarding internal control theory and the practical application of the theory, including segregation of duties. This website can be accessed at <http://www.mn.gov/mmb/internalcontrol/>.
- The Internal Control Accountability unit publishes a monthly Internal Controls Bulletin that addresses all things internal control-related. The following bulletins discuss the segregation of duties topic and/or considerations for completing the annual security role review and verification assignment. These bulletins, and all others published to date, can be accessed at <http://www.mn.gov/mmb/internalcontrol/publications/internalcontrolbulletins/index.jsp>
 - 1/22/13: Annual security certification: An internal control opportunity
 - 3/29/11: Security role assignments impact internal controls
 - 5/27/10: Maintaining internal controls during disruption
 - 4/28/10: Control activities: authorization and approval
 - 1/26/10: Information system access
 - 11/30/09: Segregation of duties, an essential control activity-
 - Please contact the MMB Internal Control and Accountability Unit if you interested in

receiving the monthly Internal Controls Bulletin.

Q30: Why are some agency assigned roles not included on the Conflict Matrix?

A: MMB attempted to populate the matrix with FMS production roles only, or in other words, only roles that are available to be assigned by agency management to agency staff. For example, not included on the matrix are EPM warehouse roles (these are non-production roles that allow inquiry capabilities only and therefore present no segregation of duties risk) or MnDOT PO project roles (these roles are available to MnDOT only).

Q31: Are there resources available to advise agencies on how to allocate the roles in a small business office, or to provide adequate backup for people on vacation?

A: No one person should be responsible for an entire transaction life cycle. Ideal separation of duties requires approval, recording, custody, and reconciliation be performed by different employees.

There are situations where it may not be possible to separate incompatible duties. Again, the ultimate goal is to have at least two individuals involved in every transaction. In these situations, it is important that management's considerations, decision, and rationale for those decisions be documented.

If applicable, your agency's internal auditor or internal control specialist are good resources to discuss options. They understand your business processes and can best advise you. The Internal Control and Accountability Unit also can talk through potential compensating controls with you, but will not make the decision for you.

Q32: How did you decide which role function to assign to each role?

A: The Internal Control and Accountability Unit reviewed each security role's description, and using that information proposed a role function for each security role: approval, recording, custody, or reconciliation. Each security role's function was then discussed with the applicable SWIFT subject matter experts to confirm the role functions that were ultimately documented on the matrix.

Q33: Is MMB prohibiting agencies from assigning any incompatible or conflicting roles?

A: No. The assignment of individual security roles is the responsibility of each agency. In each case, agency management must decide whether to assign conflicting security role combinations versus implementing compensating control procedures.

Q34: Are workflow approvals acceptable mitigating controls?

A: Perhaps. Depending upon the individual business process and the transaction type, workflow approvals may be mitigating controls. There is no way to give an all-inclusive answer to this question as each agency business and business processes are unique. Remember, the goal is to have more than one individual involved in every transaction and that it is important for there to be at least one independent approval for each transaction.

Q35: When applicable, is a centralized MMB pre-processing review and approval an adequate mitigating control?

A: MMB is generally reviewing transactions for compliance and proper form. It is important that there be at least one level of review and approval of these transactions within the agency before they are forwarded to MMB. Agency employees and managers are in the best position to understand the purpose of the transaction and ask the necessary questions before forwarding to MMB for final approval.

Q36 (Updated 1/28/15): The security role descriptions for the PO P-Card Reconciler and the PO P-Card Approver roles indicate that both roles must be assigned to each P-Card holder. However, the conflict matrix identifies these two roles as conflicting?

A: Correct. The two roles, one a reconciling role and the other an approval role, are in conflict with one another as reflected on the conflict matrix. Both roles must be assigned for EACH CARD issued, but the roles do not have to be assigned to the individual cardholders. Ideally, the reconciler and approver roles would be assigned to different individuals in order to maintain proper segregation of

duties between the reconciler and approval functions. This would ensure that all P-Card transactions are subject to review by at least one person different from the cardholder. If the two roles are assigned to the same individual, compensating control procedures must be implemented.

The security role descriptions for these two roles properly reflect that P-Card holders do not have to be assigned the reconciler or approver roles.

Below is an example of a best practice shared by an agency user:

The agency's P-Card holders are assigned the reconciler role so the cardholders can compare their purchase records (e.g., receipts and P-Card log entries) against the credit card statement to verify the accuracy of the purchases and amounts charged. The approver role is assigned to separate individual(s) that are close enough to the transaction/cardholder(s) to be able to review/approve the transactions made by the cardholder after determination the purchases were authorized, reasonable, and compliant with P-Card policy.

Q37: Whom do I contact with questions about the security roles, information about what the roles can and cannot do, how to assign roles within my agency, the conflict matrix, or compensating controls?

A: Questions about the security roles – what the roles can do and questions about how to assign roles within an agency – should be directed to the SWIFT Helpdesk. For questions regarding the conflict matrix and compensating control procedure considerations, your first point of contact should be your agency's internal auditor(s) or internal control specialist(s). If your agency does not have those resources, you can contact the MMB Internal Control and Accountability Unit. The final decisions on security role assignment and compensating controls always rest with the agency.

Q38: Is there a set of recommended compensating controls for conflicts that cannot be resolved through information security?

Q: Can you identify or provide general mitigating strategies by conflict types?

Q. Are there standard mitigating controls that MMB can provide to agencies?

A: No. Each agency's business is unique as are each agency's business processes, risks, resources, and operating cultures. These differences make it impossible for MMB to develop standard compensating controls that would be effective for every agency or every situation.

MMB Statewide Procedure, 1101-07.2, *Compensating Controls*, outlines some examples of compensating control procedures. Examples include review of detailed transaction reports and source documents, analytical procedures such as period-to-period variance analysis, and post transaction review by oversight bodies.

Compensating controls should be developed based on the agency's perceived risk relating to that transaction and the agency's unique business processes. Agencies need to consider the risks and the potential cost/benefit of the control before determining how detailed or in-depth compensating control procedures need to be.

When determining how sophisticated or detailed to make compensating control procedures or the frequency to perform them, some questions to consider are:

- What is the significance of these transaction types to our agency's objectives and mission?
- How often are these transaction types processed?
- How many dollars go through this process on a daily, weekly, monthly, annual basis?

Q39 (Updated 1/28/15): Why were roles created that are self-conflicting and what makes those roles self-conflicting? Q: Why were the "Self-Conflicting Roles" allowed to exist?

A: Segregation of duties theory suggests that ideal separation of incompatible duties is achieved when the four functional responsibilities involved in every financial transaction-approval/authorization, recording/accounting, asset custody, and reconciliation of accounting records against assets-are performed by separate, independent employees or business units.

A self-conflicting role is one that has permissions imbedded/hardwired into the role that allow users assigned that role the ability to perform two or more of the four functional responsibilities that should ideally be separated.

There were four self-conflicting roles identified on the Conflict Matrix dated 5/1/14. The reasons for why those roles existed are varied. However, as of 1/28/15, there are no longer any self-conflicting roles reflected on the Conflict Matrix. The self-conflicting roles were addressed either by elimination of the role or by removing the imbedded permissions that were causing the applicable role to be self-conflicting. See question #s 43-46 for more information about the actions taken on each of those four roles.

Q40 (Updated 1/28/15): There's a known "false positive" in the SEMA4 conflict report for users that have been granted the "onboarding" role. Has this been compensated for in the SEMA4 conflict report? Will you send additional direction?

A: The "false positive" has been removed.

Miscellaneous Questions Added After the Webinar

Questions 22 and 23, concerning payment vouchers, were added after the January 2013 webinar, but they appear in the preceding section because they are closely related to Question 21.

Q41 (New 5/1/14): Why was the conflict matrix revised to show the M_FS_PO_Buyer and the M_FS_PO_Contract_Encumbrance roles as having the exact same conflicts?

A: The PO Encumbrance role is intended to function as a "buyer's helper" role. Users assigned the encumbrance role generally do not have their name listed as a buyer on PO's they create or work with. However, absent system edits to prevent this from occurring, some users with the PO Encumbrance role have been added to the buyers table, which effectively allows that user to be added to a PO document as the buyer giving the user the authority to approve and dispatch PO's. Since both roles have the capability of functioning exactly alike, the conflict matrix must reflect each role as having identical conflicts.

Q42 (New 5/1/14): Why are the M_FS_SS_APPROVE_SOLICIT_EVENTS, M_FS_WF_PT_COORD_APPR, and M_FS_WF_STATEAGENCY_SIGN_APPR roles in conflict with one another?

A: Each of these roles is an approval role. Each SS event is programmed to be approved in sequence/succession. Strong internal control requires at least one independent review of each event/transaction, ensuring that no individual is in position to approve his/her own work, or in this case, his/her own event. Accordingly, each of these approval roles should be separate from the M_FS_SS_EVENT_BUYER role and from each other. The conflict matrix properly reflects this. SWIFT system edits generally prevent users from approving their own events. However, they are only effective if the M_FS_SS_EVENT_BUYER is not an approver or if at least one other user is assigned to each of the three approval roles. When there are multiple users in the approver roles, the system will skip the buyer (i.e. event creator) during the approval process and, instead, forward the event to the next independent approver. If, on the other hand, if the M_FS_SS_EVENT_BUYER is the only agency employee assigned all three approval roles, the system will skip the entire approval process, which does not provide adequate controls.

These conflicts will continue to appear on security report PFHR5190 as conflict risks, regardless of how many users are assigned the various approval roles. However, as long as multiple users are assigned to each of the three approval roles, the SWIFT system edits can be used as the compensating control for any "false positives" that appear on the security report.

Q43 (New 1/28/15): Why is the M_FS_AP_MAINT_VOUCHR_ERROR_DTL role no longer considered to be a self-conflicting role?

A: Permissions initially imbedded within the role resulted in the role's function being both reconciling AND recording (i.e., self-conflicting). To eliminate the conflict, the permission to create vouchers was removed from the role. This security role's function is now considered to be reconciliation only.

The change in this role's functionality also resulted in the elimination of the conflict between the M_FS_AP_MAINT_VOUCHER_ERROR_DTL and M-FS_AP_MATCH_OVERRIDE roles, as both of the roles are considered to be reconciliation only.

The Conflict Matrix, security report PFHR5190, and security role descriptions were revised to reflect these changes.

Q44 (New 1/28/15): Why is the M_FS_PO_PCARD_AGENCY_ADMIN role no longer considered a self-conflicting role?

A: Permissions initially imbedded within the role resulted in the role's functions as being recording AND reconciling AND approval (i.e., self-conflicting). To eliminate the conflicts, the approval and reconciliation permissions were removed from the role. The security role's function is now "recording" only, with permissions limited to assigning proxies and speedcharts, adding and updating cardholder profiles, reviewing the bank statement, running reports and reviewing PCard transactions. The Conflict Matrix, security report PFHR5190, and security role description were revised to reflect the changes.

When the changes were made to the PCARD ADMIN role, each user holding that role was assigned a second PCard role, the M_FS_PO_PCARD APPRVR, to ensure the user retained the exact same rights/permissions. However, by having both roles, these users still have conflicting system access and permission rights, as reflected on the Conflict Matrix. Therefore, each agency determine must whether both roles are needed for the individual users to perform their assigned PCard responsibilities. If individual users need both security roles to complete their assigned PCARD duties, the agency must implement compensating control procedures to mitigate the risk.

The Conflict Matrix, security report PFHR5190, and security role descriptions were revised to reflect these changes.

Q45 (New 1/28/15): Why is the M_FS_IN_EXPRESS_ISSUE role no longer considered a self-conflicting role?

A: This role was assumed to be self-conflicting because it was used for warehouse counter workers to withdraw inventory items from the warehouse and record the inventory withdrawal in the SWIFT system (e.g., custody AND recording functions). However, further analysis and consideration caused the SWIFT subject matter experts to re-classify this role's function as recording only, because there is no requirement that agency management assign the role to individuals that have physical custody or access to the warehouse inventory items. In fact, ideally, the role would NOT be assigned to individuals who have access to, or responsibility for maintaining physical custody, of any inventory items.

For the same reason, the Conflict Matrix no longer reflects any conflicts between the M_FS_IN_EXPRESS_ISSUE role and the following cross-module roles:

- M_FS_EPRO_BUYER
- M_FS_EPRO_REQUESTER_2
- M_FS_PO_BUYER
- M_FS_PO_CONTRACT_ENCUMB

Agencies that have assigned any of these roles to their staff, must determine if any of those individual staff members have physical access to inventory items and if so, determine if that access is necessary for those individuals to perform their job responsibilities. If individual users need to have both the role(s) and the access to or custody of inventory items, the agency must implement compensating control procedures to mitigate the additional risks.

The Conflict Matrix, security report PFHR5190, and security role descriptions were revised to reflect these changes.

Q46 (New 1/28/15): Why is the M_FS_IN_INVENTORY_MATERIAL_MGR role no longer available for agencies to assign to staff?

A: This role was developed initially for warehouse supervisory personnel. The purpose was to provide one role that would allow supervisors to perform all warehouse functions, including custodial, recording, and reconciling inventory transactions, which is why the role function was considered to be self-conflicting. That situation presented great risk as it allowed individuals with the one role to complete inventory transactions from start to finish with no involvement/review from any other independent parties.

To address the self-conflicting role functionality and provide agency users with better options to manage and reduce risk within the inventory function, this role has been eliminated and removed from production. It is no longer available for agency assignment.

When the role was removed from production, each user holding the role was assigned a suite of eleven inventory roles (listed below) to ensure the user retained the same system rights/permissions. However, by having all eleven roles, these users still have conflicting system access and permission rights, as reflected on the Conflict Matrix. Therefore, each agency must determine whether each of the eleven roles, or some combination thereof, is needed for the individual users to perform their assigned inventory responsibilities. If individual users need all eleven security roles, or a conflicting combination thereof, to complete their assigned inventory duties, the agency must implement compensating control procedures to mitigate the additional risk.

The following eleven inventory-module security roles, two of which are new roles developed specifically for this update, were assigned to the users who previously held the M_FS_IN_INVENTORY_MATERIAL_MGR role (the associated role function is provided in parenthesis):

- M_FS_IN_EXPRESS_PUTAWAY (new production role – recording function)
- M_FS_IN_INV_MANAGER_MGR_MI (new production role – inquiry function)
- M_FS_IN_INVENTORY_ADJUST_APPRV (reconciling function)
- M_FS_IN_INVENTORY_CONTROL (custody function)
- M_FS_IN_INVENTORY_BUYER (recording function)
- M_FS_IN_INVENTORY_FULFILLMENT (custody function)
- M_FS_IN_EXPRESS_ISSUE (recording function)
- M_FS_IN_INVENTORY_PO_RECEIVER (custody function)
- M_FS_IN_INVENTORY_COST_ADJUST (recording function)
- M_FS_IN_INVENTORY_INQUIRY (inquiry function)
- M_FS_IN_INVENTORY_RETURNS_RECEIVER (custody function)

The Conflict Matrix, security report PFHR5190, security role descriptions, and the Request for Access to SWIFT Statewide Systems form have been updated to reflect these changes.

Q47 (New 1/28/15): The two-page Excel version of the Conflict Matrix, dated 5/1/14, is not compliant with current accessibility standards. Are there plans to make the Conflict Matrix compliant to allow managers with disabilities to be able to review the security role conflicts?

A: Yes. An alternative Microsoft Word version of the Conflict Matrix has been developed and posted to the SWIFT Security Role Information webpage along with a revised version of the original two-page Excel version of the Conflict Matrix. The new Word version of the Conflict Matrix can be read by most technological assistive devices. Many users have expressed difficulty working with the two-page Excel matrix. While the new Word version is a much longer document

(presently 24 pages versus the two page Excel version), many users may find the new Word version easier to work with.

Q48 (New 11/1/15): Why was the M_FS_AM_LEASE_ADM role removed from the Conflict Matrix?

A: This role was removed from the Conflict Matrix because it is a central role available to SWIFT module support functional team members only. The Conflict Matrix is populated with FMS production roles only, or in other words, roles that are available to be assigned by agency management to agency staff.

Q49 (New 11/1/15): FS_AP_MATCH_OVERRIDE (a reconciliation role) and the three MS_AP_WF_APPR roles (workflow approval roles) are not identified as being in conflict on the Conflict Matrix. Why not?

A: In 2014, the ability to create a voucher was removed from the match override role. This change significantly reduced the risk associated with the role. Users with the match override role now would also need to have the MS_AP_VOUCHER_ENTRY to initiate a transaction (i.e., create a voucher) and in that case the transaction would be subject to second review/approval from an independent party assigned one of the AP_WF_APPR (workflow) roles.

Q50 (New 11/1/15) Why are the M_FS_IN_INVENTORY_BUYER (recording role) and FS_IN_INVENTORY_FULFILLMENT (custody role) now identified as being in conflict?

A: The INVENTORY BUYER role functions similarly to the PO BUYER role (a recording role), which is already identified as a conflict with INVENTORY_FULFILLMENT (a custody role). Segregation of duties theory suggests these roles are incompatible and should be segregated.

Q51 (New 11/1/15): Why are the M_FS_IN_INVENTORY_BUYER (recording role) and M_FS_IN_RETURNS_RECEIVER (custody role) no longer identified as being in conflict?

A: A user asked us to reconsider the conflict between the RETURNS_RECEIVER and the INVENTORY_BUYER roles, as was reflected on the Conflict Matrix. SWIFT inventory module subject matter experts determined the roles are NOT in conflict as the RETURNS_RECEIVER role does not allow a user to record/input a purchase order receipt to SWIFT. The Conflict Matrix and the Incompatible Role report PFHR5190 have been revised to reflect this change.